

1967

## Aligning Instructions

For all models mentioned below the repair manual of HF 45 U / Mandello 1/U / Locarno 1/U, which has been published for the manufacturing period of 1965, is valid.

## AM-IF Alignment 460 kc

Band Position of Variable Capacitor	Coupling of Signal Generator	Alignment	Sensitivity	Remarks
BC Pointer at 1 Mc	G1 EAF 801	(III) and (IV) max.	1.32 mV	Align with alternate damping (0.01 to 5 nF in series). IF Selectivity 1 : 100 IF Bandwidth 4 kc
	G1 ECH 81	(I) and (II) max.	18 $\mu$ V	
BC, tuned in	to antenna jack	(V) inner min.		Blocking ratio 1 : 25

## AM-Oscillator and Input Circuit Alignment

Band Frequency Pointer Position	Oscillator	Input Circuit	Sensitivity $\mu$ V	Image Ratio 1 : 1	Oscillation Current $\mu$ A	Remarks
BC	(1) max.	(1) inner	8 . . .	550	570 . . .	Final pointer pos. '1' of 510 kc. Alignment Sences:BC-Osc., BC input circuit SW I Osc., SW I input circuit SW II Osc., SW II input circuit Align the BC input circuit. Mix. sensitivity 100 $\mu$ V
	(2) max.	(2) max.	7 . . .	350	680 . . .	
SW I	(3) max.	(3) max.	10 . . .	200	710 . . .	1 Mc at G1 ECH 81 : 21.5 $\mu$ V
	(4) max.	(4) max.	10 . . .	15	626 . . .	
SW II	(5) max.	(5) max.	15 . . .	9	650 . . .	BC-Osc., BC input circuit SW I Osc., SW I input circuit SW II Osc., SW II input circuit Align the BC input circuit. Mix. sensitivity 100 $\mu$ V
	(6) max.	(6) max.	16 . . .	8	700 . . .	
			18 . . .	7	700 . . .	

## FM-IF Alignment 10.7 Mc

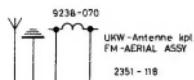
Modulation of Signal Generator	Coupling of Generator	Alignment	Indication	Sensitivity	Remarks
FM	G1 EAF 801	(a) max.	Outputmeter	11 mV	Align with the greatest deviation ( $\pm$ 75 kc) Discrimination alignment with 100 mV IF at G1 EAF 801 through the IF filter R 1.
		(b) max.	Outputmeter		
FM	G1 ECH 81	(c) max.	Outputmeter	170 $\mu$ V	Align with the greatest deviation ( $\pm$ 75 kc) Discrimination alignment with 100 mV IF at G1 ECH 81 through the IF filter R 2 (3 $\Omega$ ). R 2 is to be found above the core (b).
		(d) max.			
	wire loop to ECC 85 via 0.5 pF to point (x)	(e) inner max.	Outputmeter		
		(f) max.			

## FM-Oscillator, Intermediate- and Antenna Circuit Alignment

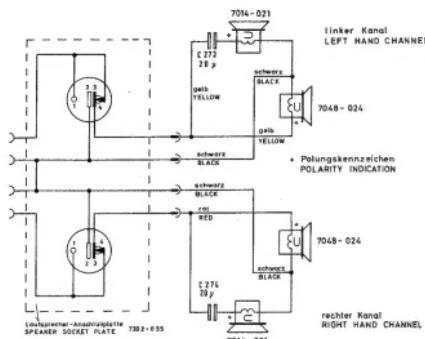
Signal Generator Frequency	Oscillator	Intermediate Circuit	Antenna Circuit	Indication	Oscill. Voltage	Sensitivity	Remarks
88 Mc	(A) max.	(B) max.	(E) max. *	Outputmeter	2.4 . . . 2.71 -	< 3 k $\Omega$	For circuit (E) being very broad, core should be adjusted to a position 2.5 mm below the upper edge of the coil form.
104 Mc	(C) max.	(D) max.					Coil F must not be detuned. If already detuned, remove and align it separately to 0.85 $\mu$ H.

Hum: L. H. Channel / R. H. Channel, L-Pot. shut 0.5 / 0.6 mV, open 0.8 / 0.8 mV

## Loudspeaker Wirings



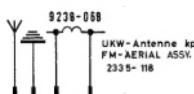
Locarno 1/U



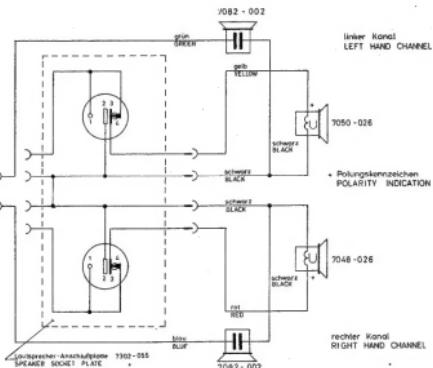
Mandello 1/U



Mandello 1/U



Mandello 1/U

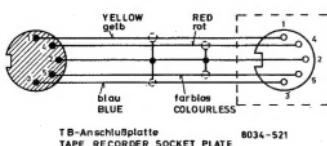


Locarno 1/U

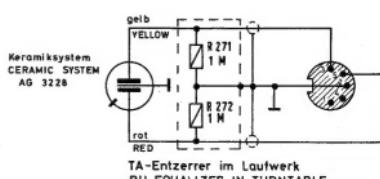


Locarno 1/U

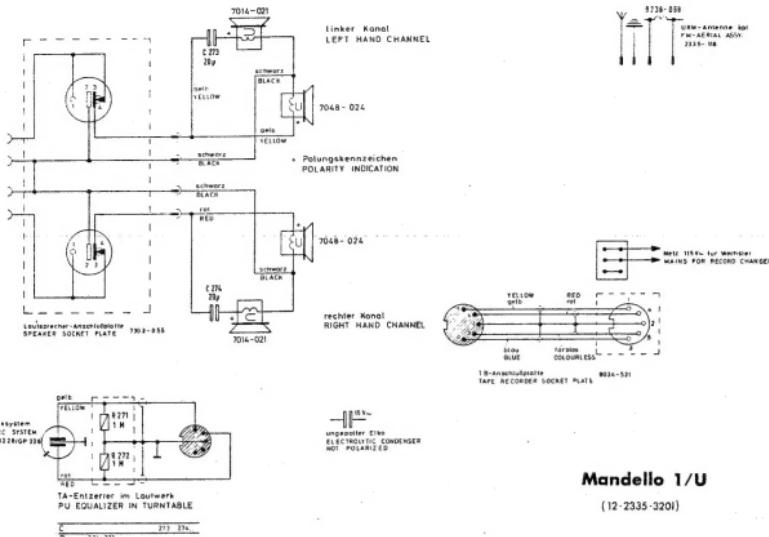
## PU-Attenuator in the Changer



Mandello 1/U  
Locarno 1/U

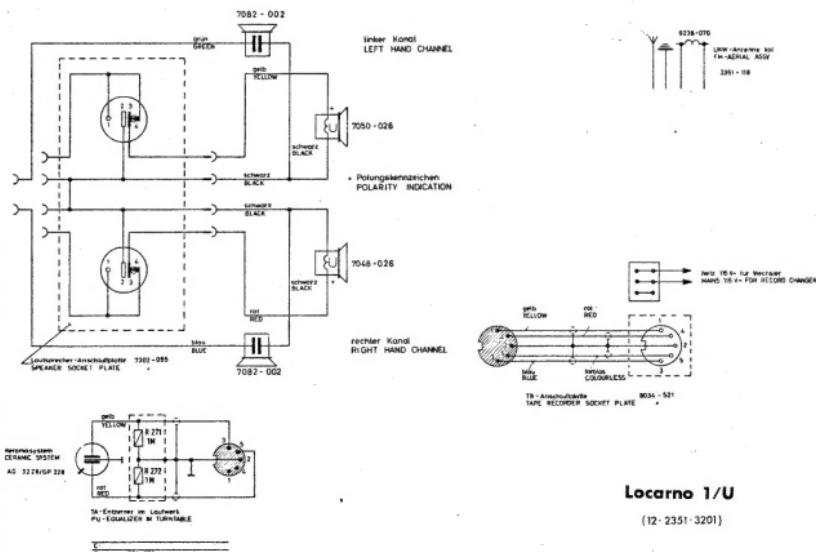


Mandello 1/U  
Locarno 1/U



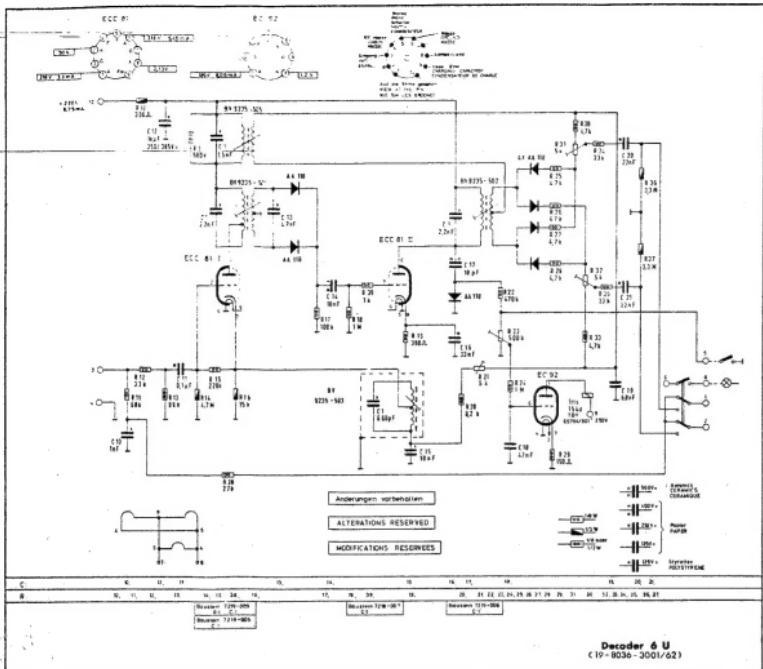
**Mandello 1/U**

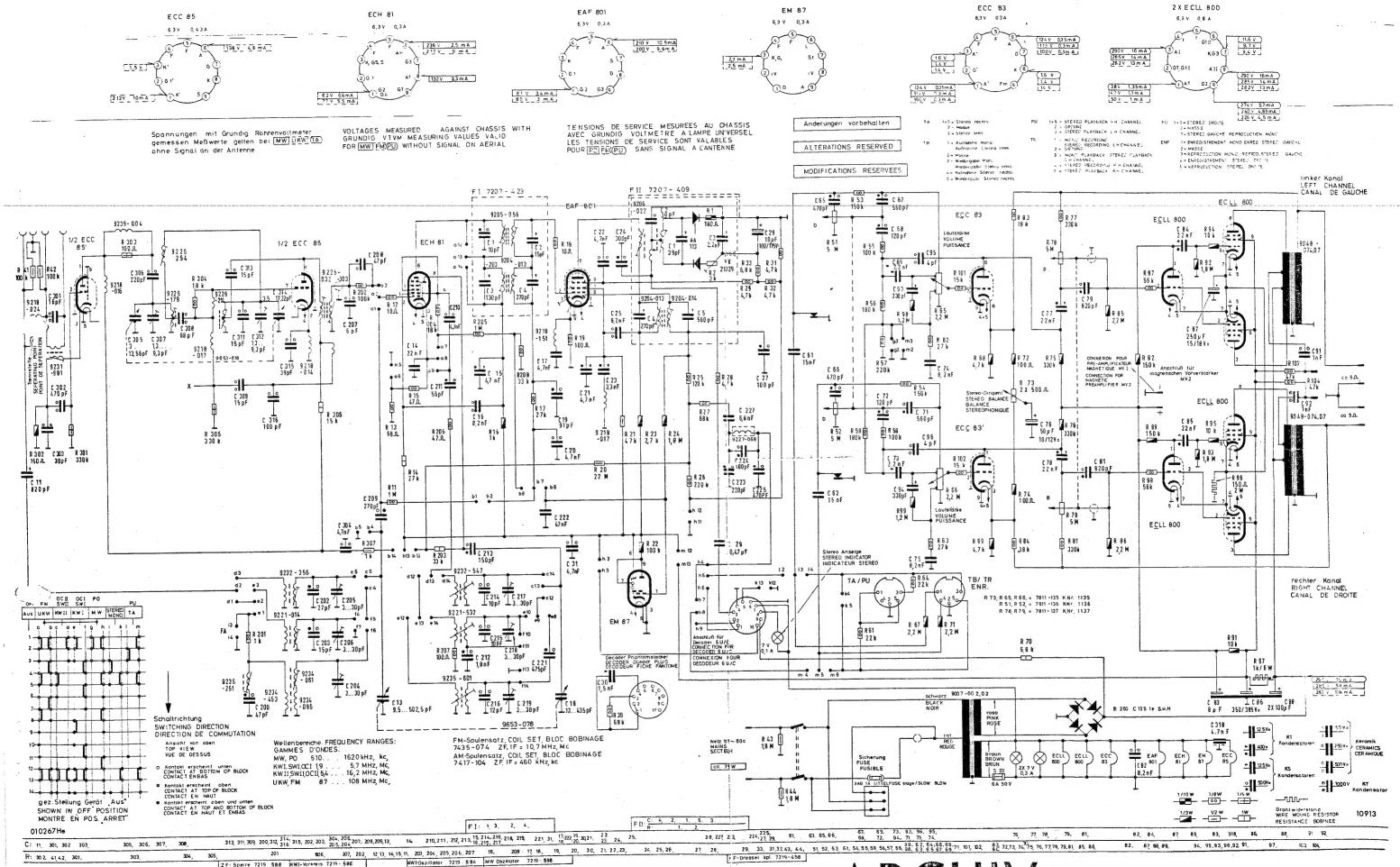
(12-2335-3201)



Lecarre 1/4

(12-2351-3201)





# ARCHIV

GRUN

**WERKE GMBH FURTH (BAY.)**  
Mandello 1/U / Locarno 1/U